$0.26<R<0.43$

A1 where R is an average variation of height for all points on the curvature, measured from the axis of symmetry to each point on the curvature.

**REMARKS**

Claims 1-3 are pending in the application. Claims 1-3 are amended. Claims 1-3 were rejected under 35 U.S.C § 112, first paragraph, as containing subject matter which was not described in the specification in such a manner as to enable one skilled in the art to make and/or use the invention. Additionally, claims 1-3 were rejected under 35 U.S.C § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regard as the invention. In view of the amendments to these claims, it is respectfully requested that the above-mentioned rejections be withdrawn.

Claim 1 was rejected because the Office action asserts that "the length L is arbitrary" and that "it is unknown as to how the applicant intended to measure the value of L." The location of the boundary between the body of a CRT and the cone is well known in the art of CRT design. For example, this location is described in detail in U.S. Patent No. 6,188,173 (Kang), (a copy of which is submitted herewith with an Information Disclosure Statement), defines the location of the boundary between the body of a CRT and the cone (top of rounds (TOR) point) as, "the cone part 30b [in Fig. 5] is concaved, and the body 30c is convexed seen from outside, and therefore tops of rounds (TOR, i.e., inflection points) are formed between the cone part 30b and the body 30c." See col. 3, lines 34-38, and Fig. 5. (Emphasis added). If the Examiner feels a declaration is necessary for this matter, the Examiner is respectfully requested to contact the under-signed attorney by telephone.

As described and shown in Kang, the location of the boundary between the body of a CRT and the cone is the top of rounds (TOR) point where the cone part is concaved, and the body part is convexed as seen from outside. Consequently, this location and the Length L, as defined in claims 1-3 are not arbitrary.

Furthermore, the Office action alleges that "the intended meaning of the phrase 'deflection power reducing shape' has not been define." Office action, page 2, third paragraph. Claim 1 has been amended to define the phrase deflection power reducing shape as being "formed in such a manner that the outer periphery of the cone has a predetermined curvature which is contiguous to the body, wherein the deflection power reducing shape is formed to have a length 0.25x L from an end of the cone at the neck, where L is an entire length of the cone from the neck to the body measured along an axis of symmetry of the cathode ray tube." In view of the amendments to claim 1, Applicants submit that the deflection power reducing shape has now been sufficiently defined and thus, it is respectfully requested that the above-mentioned rejections be withdrawn.

Claim 2 was rejected because "the shape of an arc" has not been defined. Claim 2 has been amended to define the shape of an arc as being "the outer periphery of the cone from the end of the cone at the neck to a length of 0.25x L from the end of the cone at the neck, as viewed in a cross section perpendicular to the axis of symmetry . . . with a radius satisfying the following conditions . . .." With the above amendment, Applicants submit that the shape of an arc has now been sufficiently defined and thus, it is respectfully requested that the above-mentioned rejection be withdrawn.

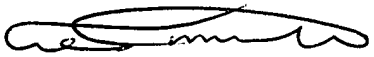
Claim 3 was rejected because "the specification fails to disclose how, or in what manner, the variation in height to be measured." The specification describes that "the outline of the cone 50b has a predetermined average variation of height h on a range of the Z axis

to a position 25% of the entire length L (the length 0.25 x L) from the origin 0 as viewed in a cross section perpendicular to the Z axis. The height h is measured from the z-axis to the outer periphery of the cone 50b." Page 7, lines 15-19. Applicants submit that the above cited passage from the specification sufficiently discloses how the variation in height is measured. That is, for every point on a range of the Z axis to a position 25% of the entire length L measured from the z-axis to the outer periphery of the cone. Claim 3 has been amended to clarify the definition of R as "an average variation of height for all points on the curvature, measured from the axis of symmetry to each point on the curvature." Therefore, it is respectfully requested that the above-mentioned rejection be withdrawn.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made**."

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By 

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RRT/cam

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A cathode ray tube comprising:

a panel, a phosphor screen being arranged on an inner surface of the panel;

a funnel having a deflection yoke on an outer periphery thereof, including:

a body connected to the panel; and

a cone connected to the body, the cone having an outer periphery; and

a neck, connected to the cone of the funnel, having an electron gun disposed therein,

wherein the cone has a deflection power reducing shape formed in such a manner that the outer periphery of the cone has a predetermined curvature which is contiguous to the body, wherein the deflection power reducing shape ~~which~~ is formed to have a ~~range of~~ length 0.25x L from an end of the cone at the neck, where L is an entire length of the cone from the neck to the body measured along an axis of symmetry of the cathode ray tube.

2. (Amended) The cathode ray tube as recited in claim 1, wherein the deflection power reducing shape is formed in such a manner that the ~~outline~~ outer periphery of the cone ~~has a shape of an arc on the range of the length 0.25x L~~ from the end of the cone at the neck to a length of 0.25x L from the end of the cone at the neck, as viewed in a cross section perpendicular to the axis of symmetry ~~and satisfies~~ has a shape of an arc with a radius satisfying the following conditions:

$$|Cz| < 4.5\text{mm}$$

$$25\text{mm} < r1 < 5\text{mm}.$$

where Cz is a coordinate of a center for the arc in the axis of symmetry direction from the end of the cone at the neck; and

r1 is ~~a~~ the radius of curvature of the arc.

3. (Amended) The cathode ray tube as recited in claim 1, wherein the deflection power reducing shape is formed in such a manner that the ~~outline~~ outer periphery of the cone ~~has a curvature on the range of the length 0.25x L~~ from the end of the cone at the neck ~~along the entire length~~ to a length of 0.25x L from the end of the cone at the neck, as viewed in a cross section perpendicular to the axis of symmetry ~~and satisfies~~ has a curvature satisfying the following condition:

$$0.26<R<0.43$$

where R is an average variation of height for all points on the curvature, measured from the axis of symmetry to ~~the~~ each point ~~of~~ on the curvature.